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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,784	09/14/2006	Kjeld Holbek	030307-0281	7761
22428 7590 07/24/2009 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER MARCANTONI, PAUL D	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 07/24/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,784	Applicant(s) HOLBEK ET AL.	
	Examiner Paul Marcantoni	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 38-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 38-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/14/06</u> . | 6) <input type="checkbox"/> Other: _____ |

35 USC 102/103:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 38-47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Dongell (US 2003/233,962-from Int'l Search Report)*, *WO 91/03437-from Int'l Search Report*) Holbek '709, Naji 277 A1 or '424 or '067, Johnson, Abbate, Comrie '551 or '946, or '478 or '823, Drochan '377 or '466, Lecolier, Timmons '420 or '740, Sadikovic '865, Ong '336 A1, Radke '210, McCarthy '069, Mazany '576 A1 or '285, Sobolev '669, Shi '305, Berke '281, Prat '650 or '885 A1, Robson '649 A1, Barton '470, Yates '954, Myles '535, McMahon 082 or 061, Greenwald '677, Garces '442, or Huntsberger '664.

All of the above cited references broadly teach and meet the limitations of at least directly claims 1 and 2 thus anticipating applicants' claims (and claims 12-13) by anticipating these claims and if not at least rendering them obvious to one of ordinary skill in the art. The examiner wishes applicants and their counsel not to be frustrated by the number of references cited because they will be quickly and promptly withdrawn

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upon amendment of the broadest claims 1 and 2 so these references no longer read upon them. However, because applicants present such broad claims, the examiner wishes only to present the best available prior art in accordance with MPEP guidelines so applicants may accordingly amend their claims. The search led to so many references that read upon especially these claims. It is not his intention to overburden applicants with references and if applicants wish to discuss said rejection in an interview, the examiner in the interest of expedited prosecution will gladly do so to assist in the expedited removal of references.

The two italicized references were presented as X references in the international search report as anticipating applicants' claims and thus have been represented for only this reason.

Holbek '709 would appear to teach all the same components and overlapping amounts thus anticipating applicants' claims. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art.

Naji '277 or '424 or '067 teach a composition comprising at least cement (base) and fly ash (amorphous silica as taught in the applicants' specification) thus anticipating applicants' invention. Even though Naji does not teach other sources of amorphous silica and/or base, it would have been obvious to use other sources of these components because they are functionally equivalent and thus obvious to one of ordinary skill in the art.

Johnson '272 teaches a composition comprising alkali hydroxide, fly ash, silica fume, and pumice and is a setting composition also thus anticipating applicants' claims.

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Even if not anticipated the use of other bases or amorphous silica would have been obvious to one of ordinary skill in the art because of functional equivalence.

Abbate '255 teach a composition comprising Portland cement, fly ash (amorphous silica) or silica fume (amorphous silica) (See claims).

Comrie '551 or '946 or '823 teach a composition comprising Portland cement (base), fly ash (amorphous silica), and fumed silica (amorphous silica).

Drochan teach a composition comprising Portland cement and colloidal silica. Again Portland cement is a base and colloidal silica is amorphous silica.

LeColier teach a composition comprising cement and microsilica.

Timmons '420 teach a composition comprising Portland cement and fly ash (base and amorphous silica respectively).

Sadikovic teach a composition comprising slag (amorphous silica source), KOH, K silicate, and K carbonate (see claims).

Ong teach a composition comprising cement (base), fumed silica, fly ash, sand, clay, and mixes thereof.

Radke teach a composition comprising hydraulic cement (base), fly ash, microsilica, water, and sand (see claims).

McCarthy teach a composition comprising cement, fly ash, and silica fume.

Mazany teach compositions comprising KOH, K silicate, and silica fume and the composition is settable or curable with water.

Sobolev teach a composition comprising cement (base), silica fume, bentonite, kaolin, etc.

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Shi teach a composition comprising Portland cement (base), liquid alkali silicate (base), and fly ash (amorphous silica source-see applicants' specification).

Berke teach a composition comprising Portland cement (base) and silica fume or fly ash.

Prat teach a composition comprising cement, precipitated silica, and water.

Robson teach a composition comprising colloidal silica, calcium aluminate cement (base), and filler.

Barton teach a composition comprising fly ash (amorphous silica), sodium silicate (base), and water.

Yates '954 teach a composition that is settable comprising colloidal silica and organic or inorganic base.

Myles '535 teach a composition comprising Al silicate fibers, amorphous silica, and calcium aluminate binder (base).

McMahon '082 teach a composition comprising colloidal silica (amorphous silica), water, Mg carbonate (base), and zinc dust (aggregate). See Example 1 in col.4.

McMahon '061 teach a composition comprising colloidal silica, LiOH (base), and zinc dust aggregate.

Greenewald '677 teach a composition comprising silica flour (amorphous silica), bentonite, luminite cement (Ca Aluminate cement-base), sodium silicate (base), and water.

Garces '442 teach a composition comprising colloidal silica and alkali silicate.

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Huntsberger '664 teach a composition comprising in Example 5, col.4, for example, a coating composition of K silicate (base), water, colloidal silica (amorphous silica), NaOH (base), and sodium methyl siliconate.

It is the examiner's position that the addition of an aggregate/filler, fibers, surfactants, solvents, accelerators, retarders (amend retardant to retarder in claim 9 please, they do not mean the same thing—retardant to the examiner seems to mean something like “fire” retardant, not cement retarder), and other admixtures. It is noted that these components are commonly and conventionally added to cementitious mixtures (MPEP 2144). It is also noted that the order of adding ingredients would also not appear to be critical and changes in the order/sequence of adding ingredients would have been prima facie obvious to one of ordinary skill in the art absent evidence to the contrary.

35 USC 112 Second Paragraph:

Claims 1-13 and 38-47 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

The term “optionally additives” would appear indefinite in claim 1. What other applicants do applicants refer?

Please amend “selected from” in claim 2 to --selected from the group consisting of---. Do the same in claim 3.

Claim 8 is indefinite because how do applicants distinguish between their amorphous silica, which, according to their specification, can be fly ash, and their added

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aggregate particles? They can be the same. Pumice has the same problem because it too can be according to applicants' specification amorphous silica.

Claim 12 is indefinite because they do not define or point out particularly what those additives are in this claim; not do they distinctly claim the specific additives. Same is true in claim 13.

It is expected that most if not all 112 issues and the bulk of the references (if not all of them) would be withdrawn upon applicants' next response. If he or she has any questions, they may call the examiner for an interview if they believe that is necessary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Paul Marcantoni/
Primary Examiner, Art Unit 1793